THE RELATIONSHIP BETWEEN STUDENTS' MORPHOLOGICAL AWARENESS AND THEIR READING COMPREHENSION

Kinanti, Ag. Bambang Setiyadi, Ujang Suparman
sayhellokinan@gmail.com

Abstract

Penelitian ini bertujuan untuk menemukan hubungan yang signifikan antara kesadaran morfologi dan pemahaman membaca siswa. Sejumlah 32 siswa dari kelas XI IPA 1 SMAN 15 Bandar Lampung dipilih sebagai kelas sampel. Metode dalam penelitian ini adalah *ex-post-facto* perihal penelitian korelasi. Alat pengumpulan datanya adalah tes *Morphological Awareness* dan *Reading Comprehension*. Hasil penelitian menunjukan koefisien korelasi terhitung lebih tinggi dibandingkan dengan nilai kritis dari *r* tabel (0.729>0.449). Selain itu dianalisis juga regresi sederhana untuk melihat seberapa jauh kesadaran morfologi berpengaruh terhadap pemahaman membaca siswa. Hasil regresi sederhana menunjukan kesadaran morfologi berpengaruh 51.5% terhadap pemahaman membaca siswa. Oleh karena itu, dapat disimpulkan bahwa ada hubungan yang signifikan antara kesadaran morfologi dan pemahaman membaca siswa. Hal itu berarti bahwa morfologi dapat diterapkan sebagai salah satu strategi demi meningkatkan pemahaman membaca siswa.

The objective of this study was to find out whether there was significant correlation between students' morphological awareness and their reading comprehension. Thirty two students of XI IPA 1 SMAN 15 Bandar Lampung were selected as sample class of this research. The design used was ex-post-facto design in term of co-relational study. The instruments were Morphological Awareness and Reading Comprehension tests. The result of calculation showed that coefficient correlation was higher than the critical value of *r* table (0.729>0.449). Simple regression was done to analyze how far the contribution of morphological awareness to students' reading comprehension. The result interpreted that morphological awareness influenced 51.5% toward reading comprehension. Therefore, it can be concluded that there is significant correlation between students' morphological awareness and their reading comprehension. It implied that morphology can be applied as strategy of increasing students' reading comprehension.

Keywords: morphological awareness, reading comprehension

INTRODUCTION

Morphology is one of the often-overlooked building blocks for reading fluency, reading comprehension, and spelling. Research is now demonstrating the importance of strong morphological teaching as early as first and second grade (Apel & Lauraence, 2011), where traditionally it has been the focus in middle and high school years. In addition, there is evidence that students learn orthography (phonics), phonology, and morphology in concert rather than in stages, when learning how to read and write. Students with strong morphological skills possess a distinct advantage over students who use a "whole word approach" to decode words (Kirby, 2011). In line with morphological awareness, another variable discusses in this research is reading. Reading is a complex cognitive process of decoding symbols in order to construct or derive meaning (reading comprehension). It is a means of language acquisition, of communication, and of sharing information and ideas. Like all language, it is a complex interaction between the text and the reader which is shaped by the reader's prior knowledge, experiences, attitude, and language community which is culturally and socially situated.

The relationship between morphological awareness and reading may be reciprocal or directional (Kuo and Anderson, 2006). In the case the relationship being reciprocal, both reading and morphological awareness can contribute to the development of one another. In directional term, morphological awareness leads to reading proficiency, but not the other way around. Students' morphological awareness may differ from other

depending on their process of understanding it in language acquisition. It might be by the formal or informal learning. In the second grade of SMAN 15 Bandar Lampung, some students had high score in reading test but on the other hand another had low score. The teacher said that the low ones also have difficulties in determining root of words. Some words with prefixes and suffixes seem become list of difficult words for them. In addition, in every test which contain of reading passage, it takes time for them to read it. They find it hard to gain the details needed from the passages in their test.

Based on the statements above, the researcher intended to investigate and observing the correlation between students' morphological awareness and their reading comprehension. Beside of that it was a new thing to observe, this research also could be useful for teacher to find better way in making students easily understand the passages in their reading tests. In this study, the writer decides to design a problem to be researched with the title: The Relationship between Students' Morphological Awareness and Their Reading Comprehension.

METHOD

This research was a quantitative study since it was focused on the product (results of the test). In this research, the researcher uses *ex post facto* design related to the co-relational study. Ex post facto design is a non experimental research technique in which preexisting groups are compared on some dependent variables (morphological awareness and reading comprehension). The sample of this research was the second year of the SMA Negeri 15

Bandar Lampung. There were 6 classes of second grade which contain of 35-40 students per class. Because this was a correlational research, researcher used only one class tested by the two data collecting instruments (T1 and T2), but researcher needed one more class for try-outing instruments. Data collection technique of this research were morphological awareness and reading comprehension tests. The collected data then tabulated and analyzed by SPSS (Statistical Package for the Social Sciences) version 17 using Pearson Product Moment Correlation formula to see the correlation between variables.

RESULTS AND DISCUSSION

Results

The result shows that the coefficient correlation between students' morphological awareness and their reading comprehension was 0.729 at the significant level of 0.01. The coefficient correlation is higher than the critical value of *r* table (0.729>0.449). Therefore, the null hypothesis was rejected and the research hypothesis was accepted. The result of this research showed that there was positive correlation between students' morphological awareness and their reading comprehension with coefficient correlation 0.729.

The number 0.729 was taken from the result of data analysis using SPSS 17, which means that the two variables were proceed using Pearson Product Moment Correlation formula and was showing certain numeric result with *r* table or *critical value* table as the guidance to see whether they

were correlated or not. If the result is more than the *r* table, so it means that positive correlation has proven. Then if the result is lower, it means that there is no correlation between variables. The position of *r* table for this research analysis was 0.449, and 0.729 is higher than it.

The positive correlation between morphological awareness and reading comprehension ability means that morphological awareness can give the influence to reading comprehension ability in order to be improved and strengthen. For example, students with codes AWN and HA got score each 90 and 92.5 in morphological awareness test and got each 93.3 in reading comprehension test. These students were gained best score in both of the test. On the other hand the student with codes ECS and JY got lowest score in both of the test (both 55 in morphological awareness test and each 56.7 and 60 in reading comprehension test). The example showed that the higher students' morphological awareness scores, the higher their reading comprehension scores. In line with that, the second example showed the lower students' morphological awareness scores, the lower their reading comprehension scores.

Discussion

From the result of morphological awareness test, it is revealed that the mean score is 75.8, the highest score is 92.5 and the lowest score is 55. Based on the results, the students performed well in both of Morpheme Identification Awareness and Morphological Structure Awareness. In the results of

Morpheme Identification Awareness, which measured students' ability to analyze and to break down complex word into smaller meaning, the students could use their knowledge of word formation rule. They were able to separate affixes of complex words. Therefore, they could unlock the meaning of newly encountered complex word. They could choose appropriate complex words to complete the sentences by breaking them into their constituent of morphemes (word meaning parts).

For, instance, the word "*incorrect*" can be recognized and comprised of two meaning units, the base "*correct* means *true*", and the prefix "*in-*" which convey the meaning of "*not* or *opposite from*". Thus, word "*incorrect*" means "*not true*". The students could segment different meaningful chunks that constitute a word. This condition is supported by Carlisle (1995) who emphasizes that Morpheme Identification can be seen as problem solving strategy that can be used to understand a large number of derived words.

From the perspective of cross linguistic variation, the learners might transfer they knowledge of morphological structure of Bahasa Indonesia to English morphology. The affixes of Bahasa Indonesia and English are separable from root even though Bahasa Indonesia morphology is considered simpler than English because it does not mark tenses, gender or plural forms. Two groups of verbs in Bahasa Indonesia primarily occur with form of affixation (prefixes and/or suffixes). For instance, in Bahasa Indonesia the learners study about prefixes or suffixes (*imbuhan: men-cuci, mem-beri-kan, ke-makmur-an, etc.*). By using the ability to appreciate the separability of bases from affixes, the students encode unfamiliar English complex words into

their meaningful morpheme, so they could infer the meaning to complete the sentence.

The students also performed well in Morphological Structure Awareness. This section is concerned with productivity of morphological structure or bringing the smallest pieces (morpheme) together to form words. Ii is assumed that learners know what the pieces are to construct new meaning into words (Arnoff & Fudeman, 2005). In forming new compounds by stringing together to other words, the students showed better performance when the target words are in the same grammatical category such as noun + noun, such as *tea cup* and *milk glass*. However, most of the students could not answer correctly when they were asked to create *earrings*. This could be linked to the same features of the two target words, both are plural (*ears* and *rings*). The participants could not apply their syntactic knowledge about the importance of deleting *–s* ending from *ears* to form the compound *earrings*. The students obtained a good performance in applying *–s* and *–es* suffix as the marker for plurality (Appendix 14, items 31, 32, 33). They could answer the questions very well and more than 70% of the participants obtained the maximal score 100%. They also showed well performance in applying the *–ing* and *–ed* suffixes as the markers for present and past participle (items 34, 35, 36) with 81%, 60% and 66% correct answer respectively. These findings are consistent with Carlisle (1995), and Carlisle & Stone (2003) who said that morphological awareness refers to the learners' knowledge of morphemes and morphemic structure, allowing them to reflect and manipulate morphological structure of words.

However, they seemed to have problem in using *–es* for making "*goes*" as the change from "*going*". This problem might occurred because the "*goes*" form indicates the change form for the third singular subject. Most of the students find difficulties in changing the verb "*going*" to "*goes*" because verb "*go*" ending with vocal "*o*" so it must be added by suffixes *–es* to indicate present tense for the singular subject. Another test was reading comprehension test. About 32 students had done 30 items reading comprehension test. The results revealed that the average score is 76.8, while the highest score is 93.3 and the lowest is 56.7. The items contained of raeding comprehension aspects such as determining main idea, finding specific information, reference, inference, and vocabulary.

From the result of reading comprehension test, items represent main idea were answered 80% true by the students of XI IPA 1. It showed that students were understood clearly how to find out the main idea of texts in the test. Segretto (2002) states that main idea of a reading selection is what the passage is mostly about. In line with that, the ability of students choosing the right answer of main idea obviously was shown the ability of understanding the overall idea of the text which is very important in reading comprehension.

On the other hands, it can be seen from the students' answer of items which are standing for inference of the reading comprehension test, about 40% students could not answer correctly. In this part students need to bring out their understanding of the specific part inside of the text such as their

opinion about the characters or the topics. By definition, inference requires that each reader construct a meaning that makes the text a reflection of her/his experience (Moreillon, 2007).

For some of the items stand for vocabulary part also proven the different ability of each students to understand another name of a word or the word that has same meaning as the one they were faced with. In these items, only 17 out of 32 students answered correctly. Linan (2007) states that the role of vocabulary in reading is clearly understood: vocabulary knowledge, the understanding of word meanings and their use, contributes to reading comprehension and knowledge building. Based on the statement, can be concluded students with high understandings of words meaning and their use were predicted to answer the items correctly.

From the result of calculation, it is found that the coefficient correlation between students' morphological awareness and their reading comprehension was 0.729 at the significant level of 0.01. The coefficient correlation is higher than the critical value of r table (0.729>0.449). It means that the result of this research showed that there was positive correlation between students' morphological awareness and their reading comprehension. In addition, the result of simple regression that has done by the researcher shows the coefficient determination was 0.515. It means that morphological awareness influenced 51.5% toward reading comprehension and 48.5% influenced by other factors.

In line with the results, Wysocki and Jenkins (1987) stated that morphological awareness depends on experience with printed words for refinement, but itself is also functional in the development of reading comprehension ability. Because it entails the ability to perform morphological analysis, morphological awareness has often been found to be contributor to word learning and vocabulary development in that learners can decompose unknown morphologically complex words into their constituent morphemes and apply morphological rules to derive meanings of unknown words. And also based on Ku and Anderson (2003), and Nagy (2006) clearly stated that because of the inter-relations between morphological awareness and vocabulary knowledge on one hand, and vocabulary knowledge and reading compre-hension on the other hand, researchers often controlled for vocabulary knowledge when the unique contribution of morphological awareness to reading comprehension was examined. Since students are confront a very large amount of complex words in their academic reading and since complex words are analyzable into smaller meanings, it make sense if morphological awareness can be used as a strategy for unlocking meaning of newly encountered words in reading texts. In accordance to the interview with second grade teacher of SMAN 15 Bandar Lampung, Mr. Edi Sutopo in the pre-observation activity, he stated that he only teaches words formation or even words compounding in the very small amount among the formal material. There is no specialization in the current curriculum (Curriculum 2006) of teaching morphology to high school the students. This research shows the students'

need to know more about morphology to increase their awareness of it, and in line with that can impact to the increasing of their reading comprehension ability which is take a big part in senior high school students' English learning. Besides of the relationship with reading, morphological awareness also related to various language skills such as spelling and also vocabulary.

CONCLUSIONS

There is a significant correlation between students' morphological awareness and their reading comprehension ability at second grade of SMAN 15 Bandar Lampung. The hypothesis testing shows that the coefficient correlation is very high, 0.729 at significant level of 0.01. The coefficient correlation is higher than the critical value of *r* table (0.729>0.449). Therefore, the null hypothesis was rejected and the research hypothesis was accepted, which states that if the students obtained high score in morphological awareness, they tended to get high score in reading comprehension. The result of sample regression showed that the coefficient determination was 0.515. This implied that, morphological awareness contributes 51.5% to their reading comprehension ability and 48.5% was influenced by the other factors. It means that morphological awareness can be applied at reading classes to improve their ability to read.

REFERENCES

Apel, K., & Lawrence, J. 2011. Contributions of morphological awareness skills to word-level reading and spelling in first-grade children with and without speech sound disorder. *Journal of Speech, Language, and Hearing Research, 54, 1312-1327*

Arnoff, M., & Fudeman, K. 2005. *What is Morphology?* (3- 21). Malden: Blackwell.

Carlisle, J. F. 1995. *Morphological awareness and early reading achievement. In L. B. Feldman (Ed.), Morphological aspects of language processing (pp. 189–209).* Hillsdale, NJ: Erlbaum.

Carlisle, J. F., & Stone, C. A. 2003. Exploring the role of morphemes in word reading. *Reading Research Quarterly, 40, 428–449.*

Kirby, J. R., & Deacon, S. H. 2011. Morphological Awareness: Just "More Phonological"? The Roles of Morphological And Phonological Awareness in Reading Development. *Applied Psycholinguistics, 25, 223–238.*

Ku, Y-M., & Anderson, R. C. 2003. Development of Morphological Awareness in Chinese and English. *Reading and Writing: An InterdisciplinaryJournal, 16, 399- 422.*

Kuo, L., & Anderson, R.C. 2006. Morphological awareness and learning to read: A cross-language perspective. *Educational Psychologist, 41(3), 161-180.*

Linan, S. T. 2007. *Research-based Method of Reading Instruction for English Language Learners*. London: Audiobook Publishing.

Moreillon, J. 2007. Collaborative Strategies for Teaching Reading Comprehension. Dallas: Star Bright Books

Nagy, W. E., Berninger, V.W., & Abbott, R.C. 2006. Contributions of morphology beyond phonology to literacy outcomes of upper elementary and middle-school students. *Journal of Educational Psychology, 98,* 134-147.

Segretto, M. 2002. *Roadmap to 8th Grade Reading*. Toronto: The Princeton Review.

Wysocki, K., & Jenkins, J. R. 1987. Deriving Word Meanings Through Morphological Generalization. *Reading Research Quarterly, 22(1), 66-81*.